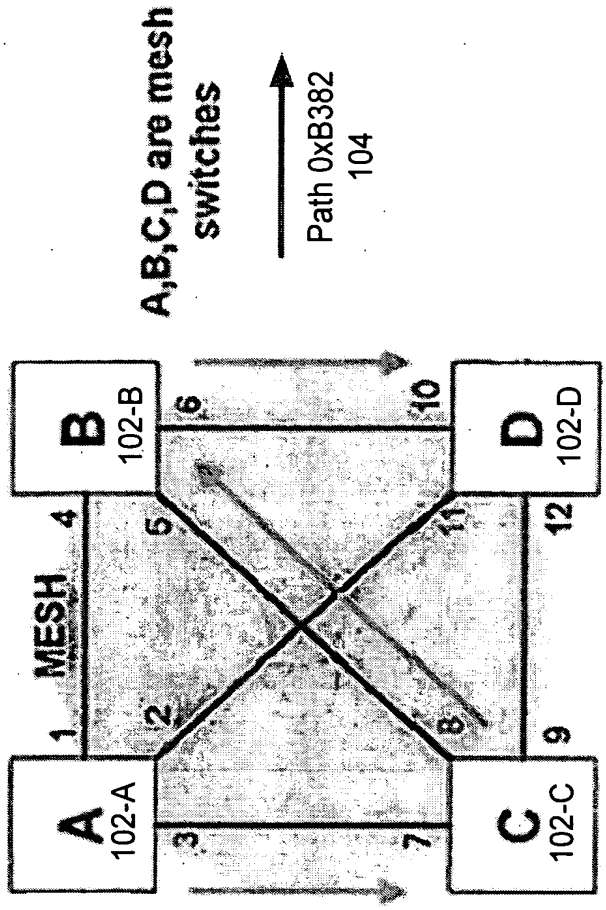
A,B,C,D are mesh switches
Path 0xB382
104
MESH
A
102-A
B
102-B
C
102-C
D
102-D
1
2
3
4
5
6
7
8
9
10
11
12

FIG. 1

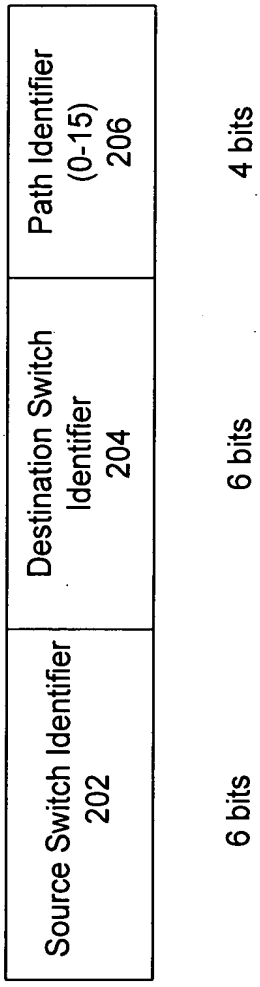
Source Switch Identifier
202
Destination Switch
Identifier
204
Path Identifier
(0-15)
206
6 bits
6 bits
4 bits

FIG. 2

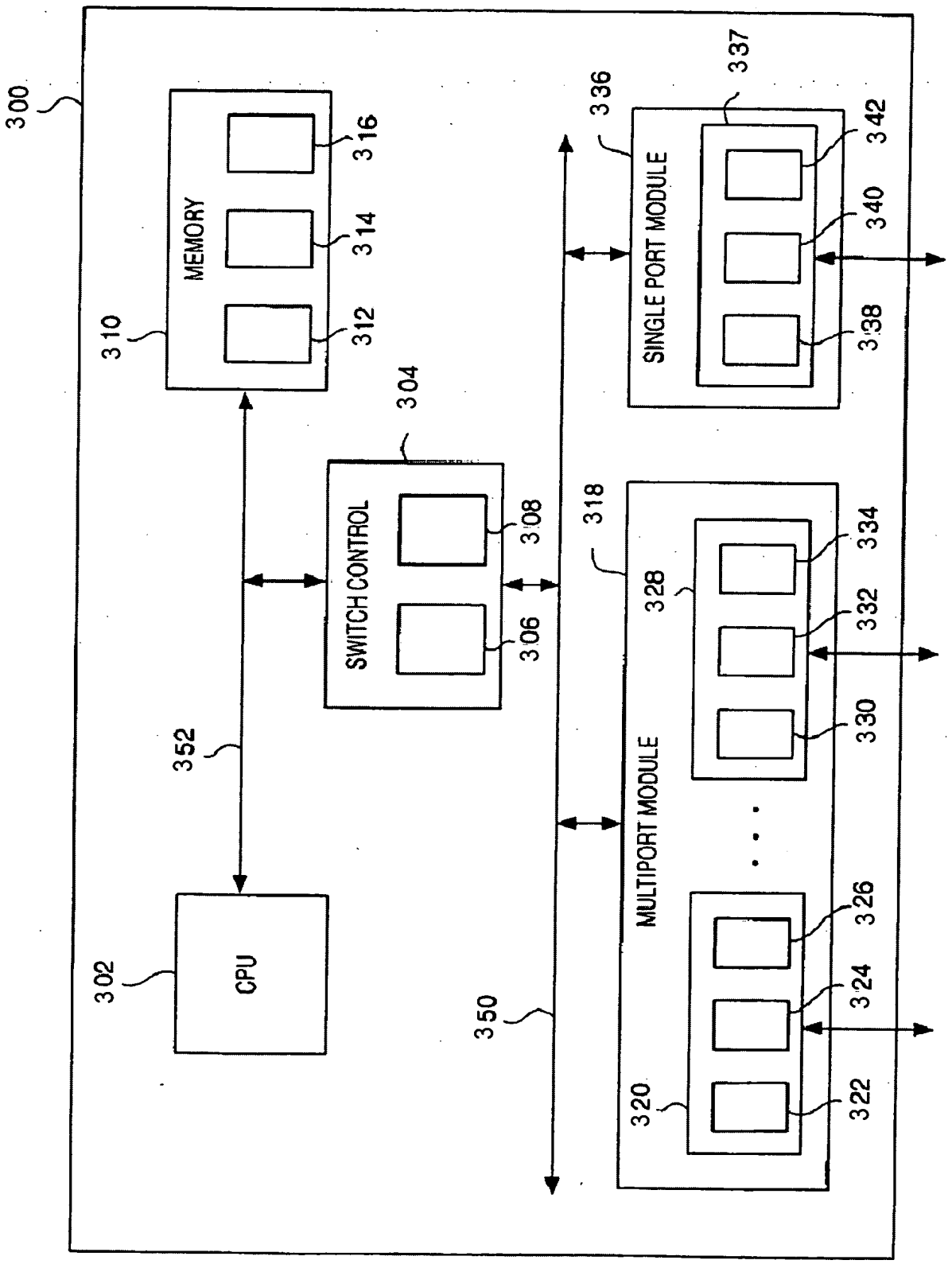
300
MEMORY
316
314
312
310
304
SWITCH CONTROL
308
306
352
CPU
302
336
337
SINGLE PORT MODULE
342
340
338
318
328
MULTIPORT MODULE
334
332
330
326
324
322
320
350

FIG. 3

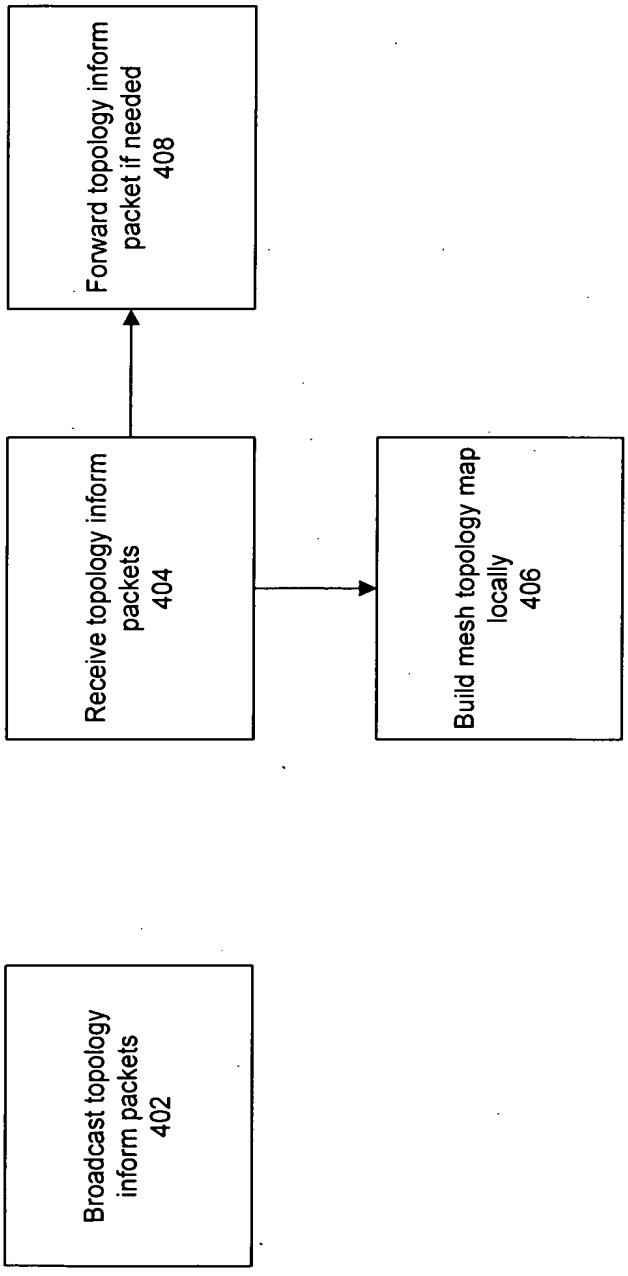
Broadcast topology inform packets
402
Receive topology inform packets
404
Build mesh topology map locally
406
Forward topology inform packet if needed
408

FIG. 4A

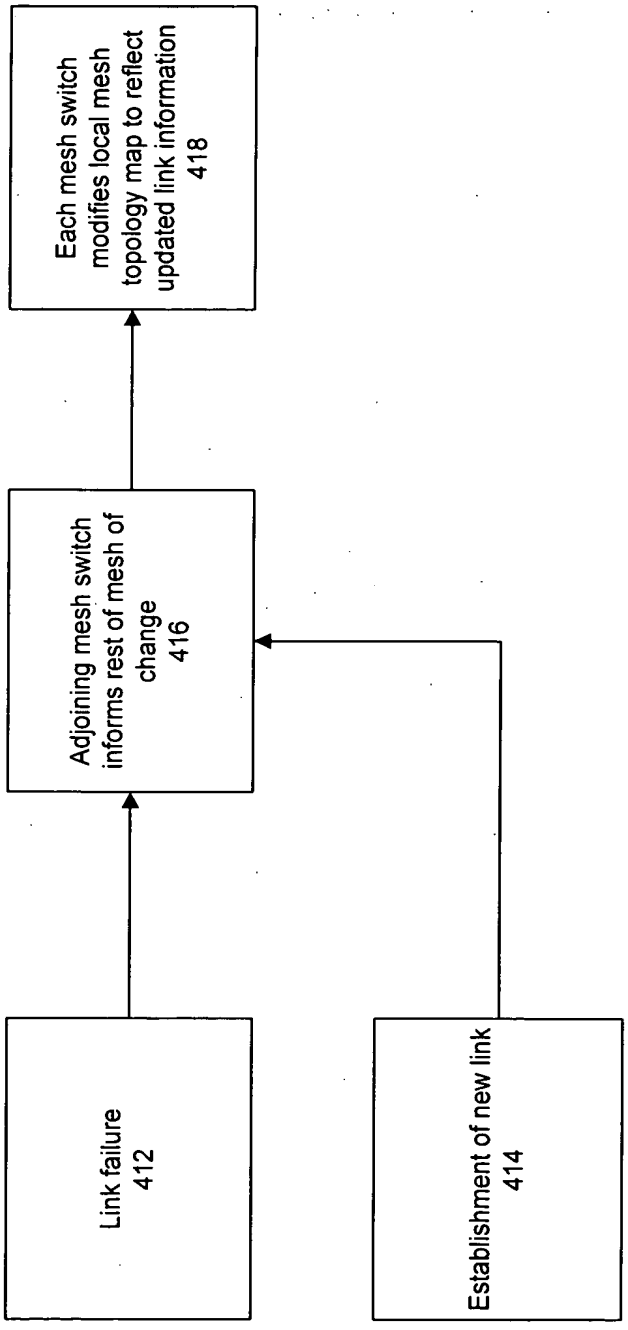
Each mesh switch modifies local mesh topology map to reflect updated link information 418
Adjoining mesh switch informs rest of mesh of change 416
Link failure 412
Establishment of new link 414

FIG. 4B

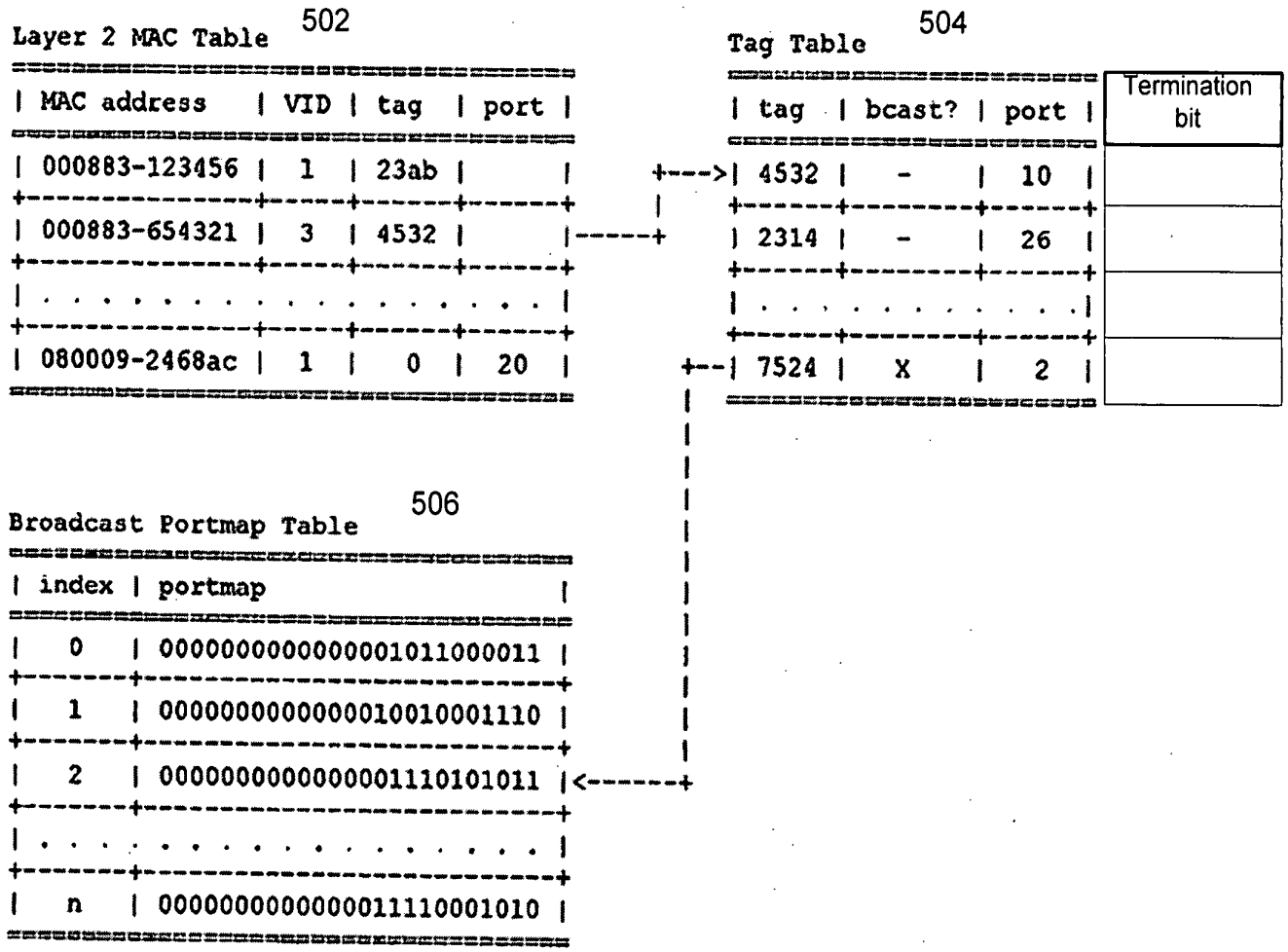
Layer 2 MAC Table
502
MAC address
VID
tag
port
000883-123456
1
23ab
000883-654321
3
4532
080009-2468ac
1
0
20
Tag Table
504
tag
bcast?
port
Termination bit
4532
-
10
2314
-
26
7524
X
2
Broadcast Portmap Table
506
index
portmap
0
00000000000000001011000011
1
00000000000000010010001110
2
00000000000000001110101011
n
00000000000000011110001010

FIG. 5

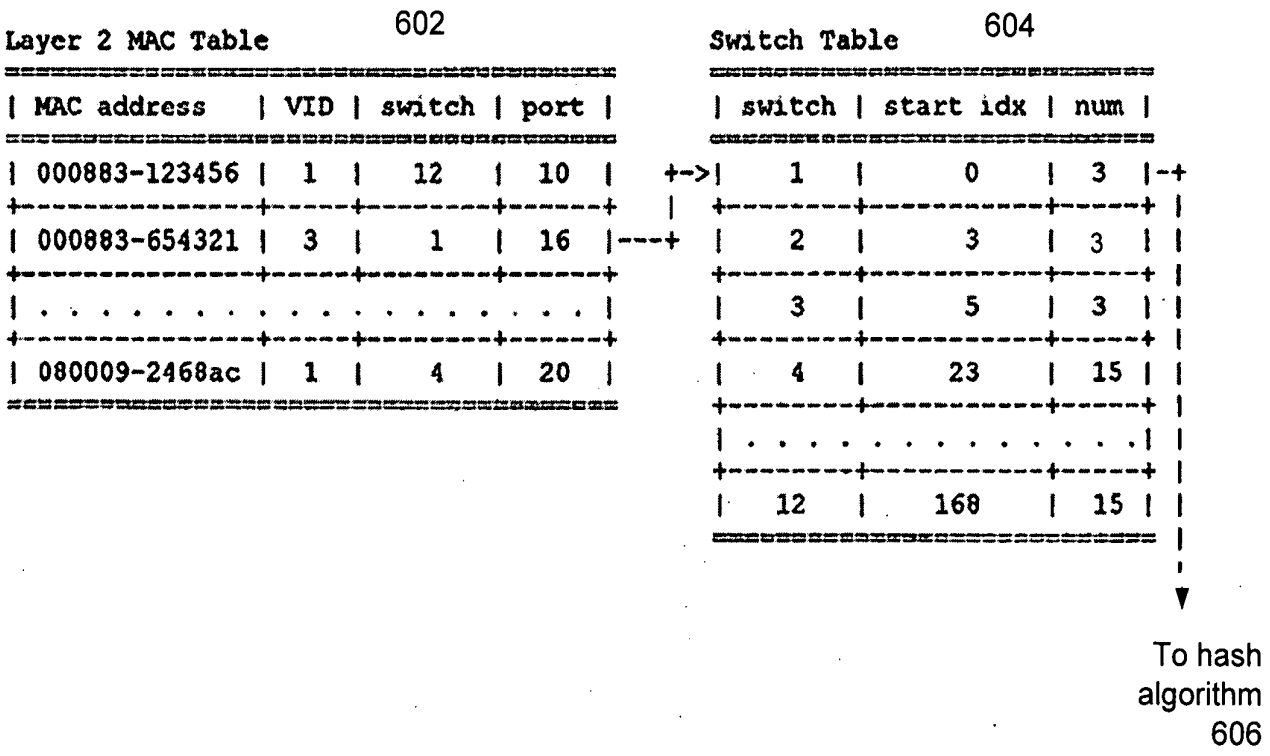
Layer 2 MAC Table
602
MAC address
VID
switch
port
000883-123456
1
12
10
000883-654321
3
1
16
080009-2468ac
1
4
20
Switch Table
604
switch
start idx
num
1
0
3
2
3
3
3
5
3
4
23
15
12
168
15
To hash algorithm 606

FIG. 6A

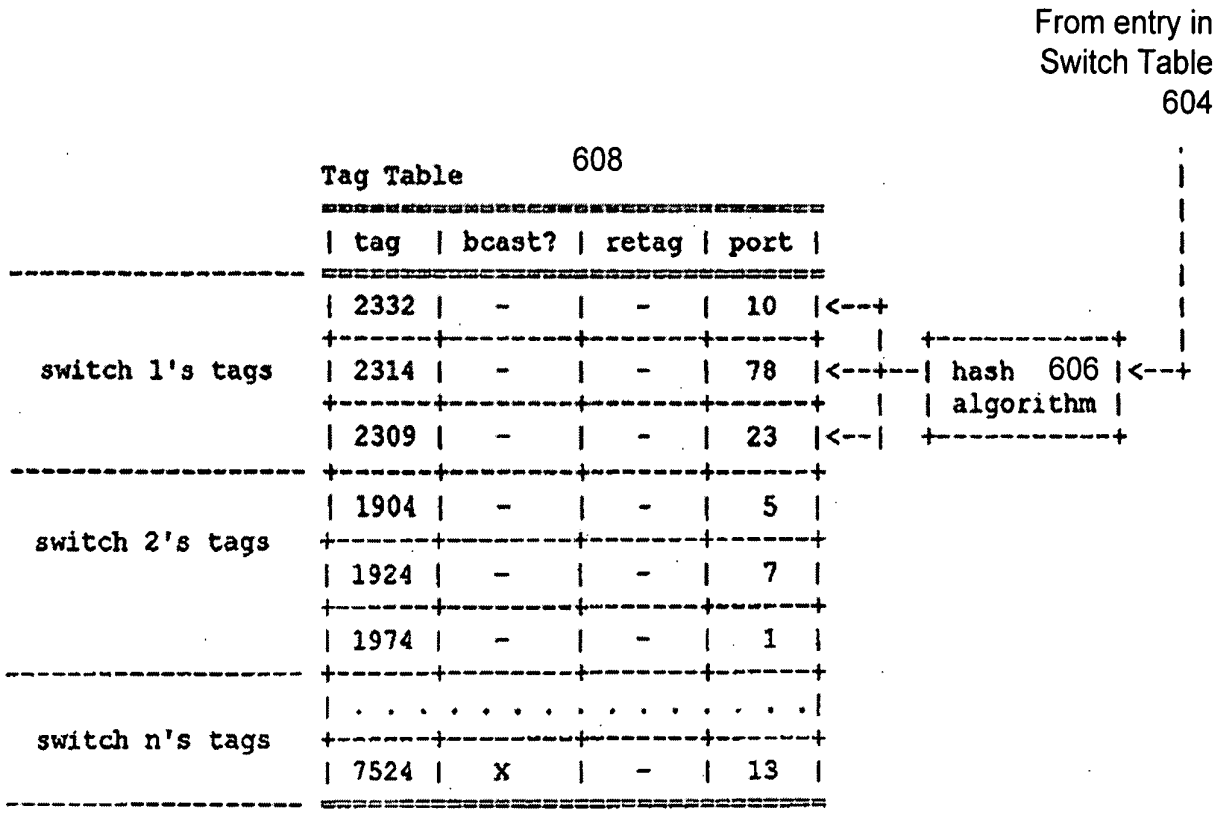
From entry in Switch Table 604
608
Tag Table
tag
bcast?
retag
port
switch 1's tags
2332
2314
2309
switch 2's tags
1904
1924
switch n's tags
1974
7524
X
10
78
23
5
7
1
hash algorithm
606

FIG. 6B

Tag	Num Hops	Links
0xB201	3	10,100
0xB202	4	100
0xB203	2	1000
0xB204	5	1000,100

FIG. 7

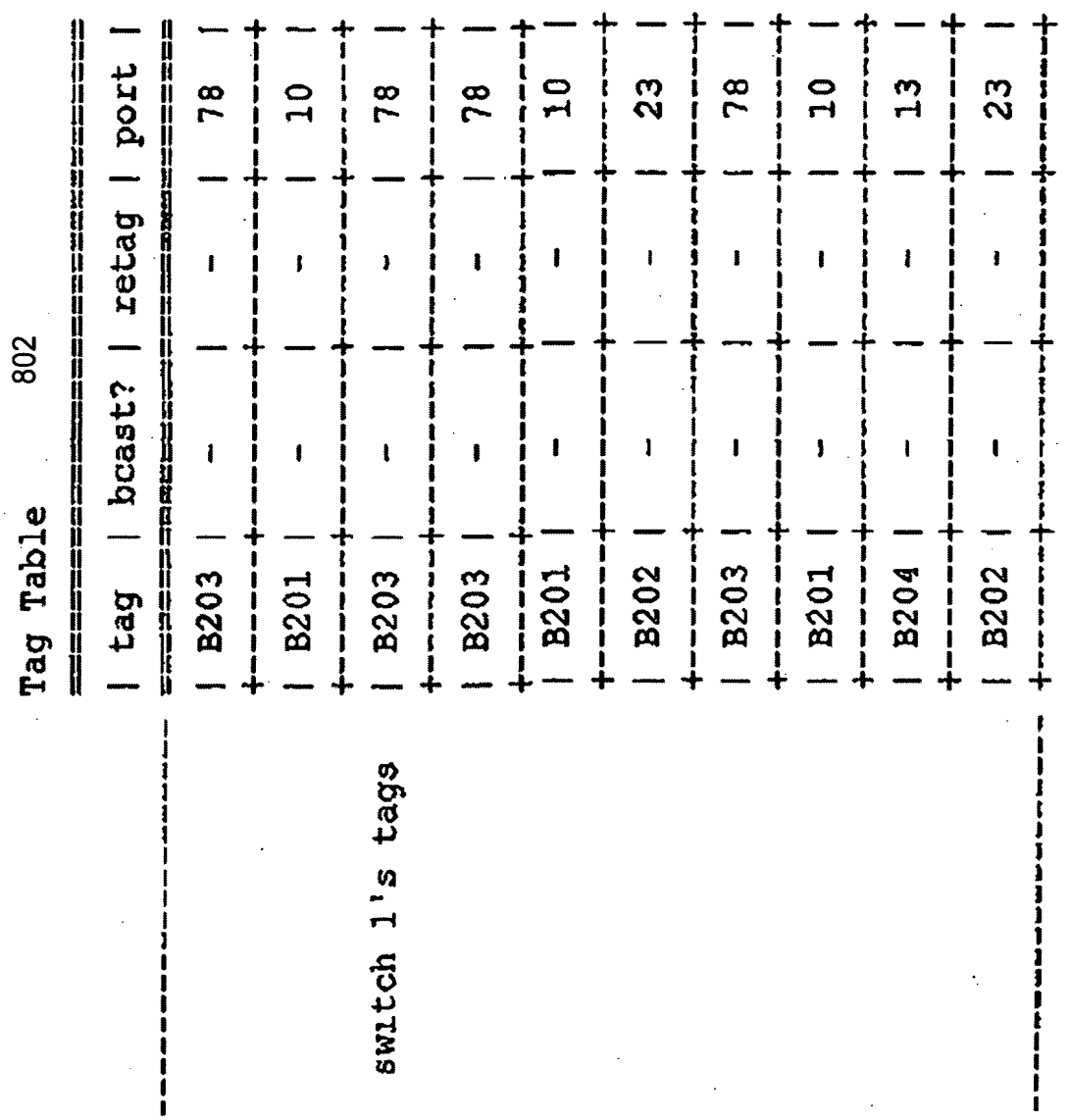
Tag Table
802
switch 1's tags
tag
bcast?
retag
port
B203
-
-
78
B201
-
-
10
B203
-
-
78
B203
-
-
78
B201
-
-
10
B202
-
-
23
B203
-
-
78
B201
-
-
10
B204
-
-
13
B202
-
-
23

FIG. 8

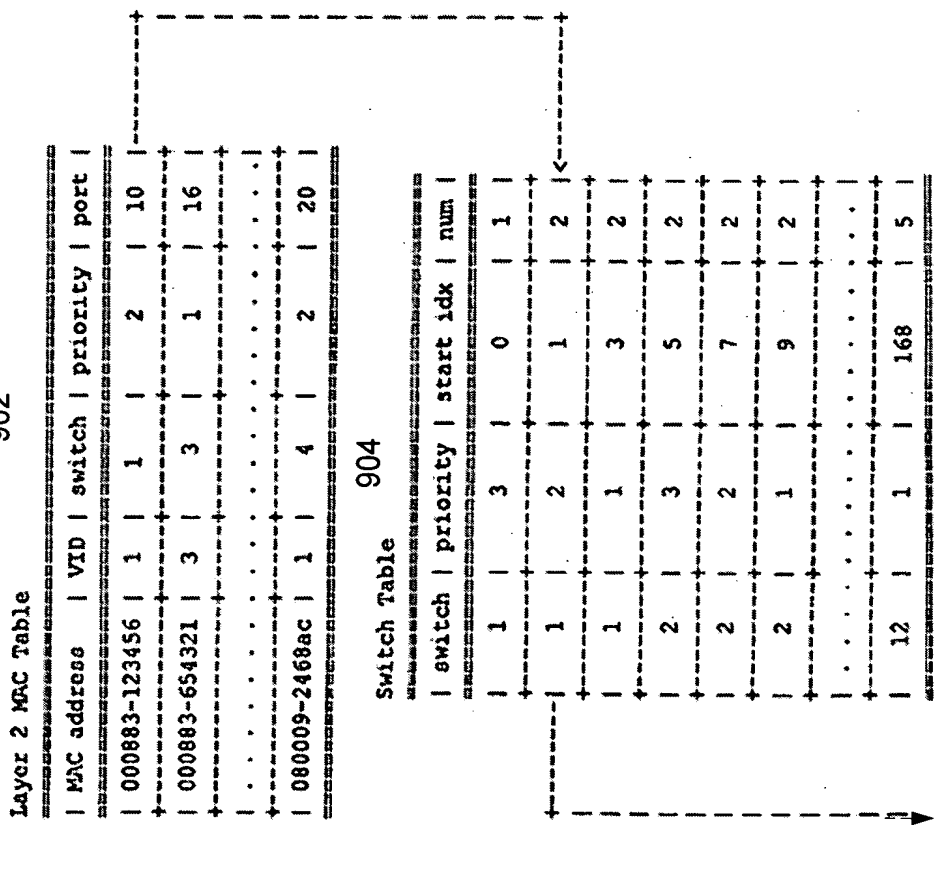
902
Layer 2 MAC Table
MAC address | VID | switch | priority | port
000883-123456 | 1 | 1 | 2 | 10
000883-654321 | 3 | 3 | 1 | 16
080009-2468ac | 1 | 4 | 2 | 20
904
Switch Table
switch | priority | start idx | num
1 | 3 | 0 | 1
1 | 1 | 1 | 2
1 | 2 | 3 | 5
2 | 3 | 5 | 2
2 | 2 | 7 | 2
2 | 1 | 9 | 2
12 | 1 | 168 | 5
To hash algorithm 906

FIG. 9A

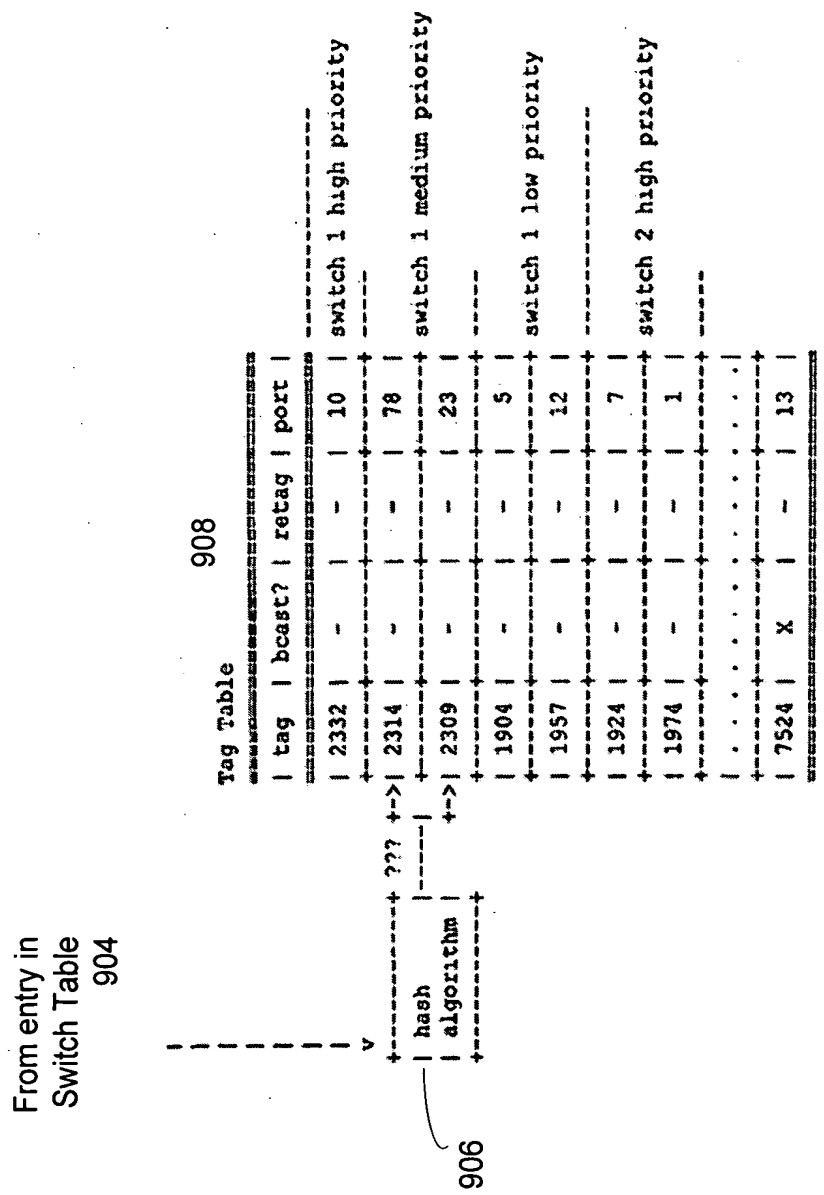
From entry in Switch Table
904
906
908
hash algorithm
???
Tag Table
tag | bcast? | retag | port
2332 | - | - | 10 | switch 1 high priority
2314 | - | - | 78 |
2309 | - | - | 23 | switch 1 medium priority
1904 | - | - | 5 |
1957 | - | - | 12 | switch 1 low priority
1924 | - | - | 7 |
1974 | - | - | 1 | switch 2 high priority
7524 | X | - | 13 |

FIG. 9B